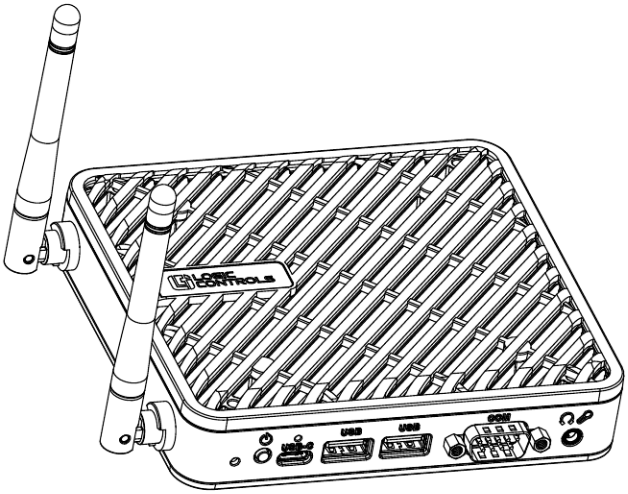
USER MANUAL

VERSION 1.0 November 2024

Logic Controls Inc.

Elite 9550



Copyright 2024
All Rights Reserved
Manual Version 1.0

The information contained in this document is subject to change without notice.
We make no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. We shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced or translated to another language without the prior written consent of the manufacturer.

TRADEMARK

Intel®, Pentium® and MMX are registered trademarks of Intel® Corporation.
Microsoft® and Windows® are registered trademarks of Microsoft Corporation.
Other trademarks mentioned herein are the property of their respective owners.

Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical power supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
10. This equipment must be grounded. The power cord for product should connect to a socket-outlet with earthing connection.

CE MARK

This device complies with the requirements of the EEC directive 2014/30/EU with regard to “Electromagnetic compatibility” and 2014/35/EU “Low Voltage Directive”.

FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer’s instructions.

Battery Caution

Risk of explosion if battery is replaced by an incorrectly type. Dispose of used battery according to the local disposal instructions.

Safety Caution

Note: To comply with IEC60950-1 Clause 2.5 (limited power sources, L.P.S) related legislation, peripherals shall be 4.7.3.2 “Materials for fire enclosure” compliant.

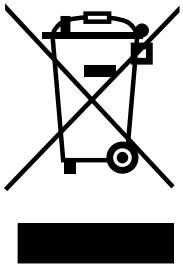
4.7.3.2 Materials for fire enclosures
For MOVABLE EQUIPMENT having a total mass not exceeding 18kg.the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of V-1 CLASS MATERIAL or shall pass the test of Clause A.2.
For MOVABLE EQUIPMENT having a total mass exceeding 18kg and for all STATIONARY EQUIPMENT, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of 5VB CLASS MATERIAL or shall pass the test of Clause A.1

CAUTION

1. Lithium Battery Caution: Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type. Dispose batteries according to manufacturer's instructions.
2. Disposal of a BATTERY into fire or a hot oven, or mechanically crushing or cutting of a BATTERY, that can result in an EXPLOSION.
3. Leaving a BATTERY in an extremely high temperature surrounding environment that can result in an EXPLOSION or the leakage of flammable liquid or gas.
4. A BATTERY subjected to extremely low air pressure that may result in an EXPLOSION or the leakage of flammable liquid or gas.

LEGISLATION AND WEEE SYMBOL

2012/19/EU Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dust bin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

Sécurité

INSTRUCTIONS IMPORTANTES RELATIVES À LA SECURITE

1. Pour débrancher la machine de l'alimentation électrique, éteignez l'interrupteur d'alimentation et retirez le cordon d'alimentation de la prise murale. La prise murale doit être facilement accessible et à proximité de la machine.
2. Lisez attentivement ces instructions. Conservez ces instructions pour une référence future.
3. Suivez tous les avertissements et les instructions indiquées sur le produit.
4. Ne pas utiliser ce produit à proximité de l'eau.
5. Ne pas placer ce produit sur un chariot, un support ou une table. Le produit peut tomber, causant de graves dommages à l'appareil.
6. Les fentes et les ouvertures dans le boîtier, l'arrière ou le fond sont prévues pour la ventilation afin d'assurer un fonctionnement fiable du produit et le protéger de la surchauffe. Ces ouvertures ne doivent pas être obstruées ou couvertes. Les ouvertures ne doivent jamais être bloquées en plaçant l'appareil sur un lit, un canapé, un tapis ou autre surface similaire. Ce produit ne doit jamais être placé : à proximité ou sur un radiateur, sur un registre de chaleur ou dans une installation intégrée à moins qu'une ventilation adéquate soit prévue.
7. Ce produit doit être utilisé avec le type d'alimentation indiqué sur l'étiquette. Si vous n'êtes pas sûr du type d'alimentation disponible, consultez votre revendeur ou représentant local de l'entreprise.
8. Ne laissez rien reposer sur le cordon d'alimentation. Ne placez pas ce produit là où des personnes peuvent marcher sur le cordon.
9. N'introduisez jamais d'objets d'aucune sorte dans ce produit à travers les fentes du coffret car ils pourraient entrer en contact avec des points sous tension dangereux ou court-circuiter des pièces. Ne renversez jamais de liquide d'aucune sorte sur le produit.
10. Cet équipement doit être relié à la terre. Le cordon d'alimentation du produit doit être connecté à une prise de courant doté d'une connexion à la terre

Logo CE

Cet appareil est conforme aux exigences de la directive européenne 2014/30/EU sur “la compatibilité Électromagnétique” et à celles de la directive 2014/35/EU “Directive Basse Tension”.

FCC

Cet appareil observe la partie 15 des règles de la FCC. L’opération est soumise aux deux conditions suivantes :
(1) Cet appareil ne peut pas causer d’interférence nuisible
(2) Cet appareil doit accepter n’importe quelle interférence reçue, y compris une interférence qui pourrait causer un disfonctionnement non souhaité.

AVERTISSEMENT SUR LES BATTERIES AU LITHIUM

Il y a un danger d’explosion si la batterie n’est pas remplacée correctement. Remplacez-la uniquement par une batterie identique ou de type équivalent recommandée par le fabricant. Les batteries usagées doivent être mises au rebut conformément aux instructions du fabricant.

Avertissement Batterie

Risque d’explosion si la batterie est remplacée par un élément incompatible.
Jetez les batteries usagées selon les instructions des dispositions locales .

Avertissement de sécurité

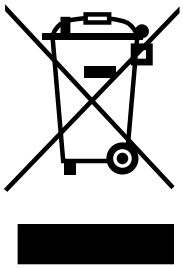
Remarque: Pour répondre à la norme IEC60950-1 alinéa 2.5 (sources d’énergie limitées, LPS) liés la législation, les périphériques doivent être conformes 4.7.3.2 “Matériaux pour enceinte coupe-feu»
4.7.3.2 “Matériaux pour équipements coupe-feu»
Pour les équipements mobiles ayant une masse totale n’excédant pas 18kg :
Les matériaux d’un équipement coupe-feu, dans l’épaisseur de paroi retenue la plus significativement mince, doivent être des matériels de CLASSE V-1 ou doivent passer le test de l’article A.2.
Pour équipements mobiles ayant une masse totale supérieure à 18 kg et pour tous les équipements FIXES :
Les matériaux d’un équipement coupe-feu dans l’épaisseur de paroi retenue la plus significativement mince, doivent être des matériels de CLASSE V-1, doivent être de classe Matériel 5VB ou doivent passer le test de l’article A.1.

AVERTISSEMENT

1. Batteries au lithium : danger d'explosion si la batterie n'est pas remplacée correctement. Remplacez uniquement par une batterie identique ou de type équivalent. Les batteries usagées doivent être mises au rebut conformément aux instructions du fabricant.
2. La mise au rebut d'une BATTERIE dans un feu ou un four chaud, broyage mécanique ou découpage d'une BATTERIE peut entraîner une EXPLOSION.
3. Laisser une BATTERIE dans un environnement à température extrêmement élevée peut provoquer une EXPLOSION ou une fuite de liquide ou de gaz inflammable.
4. Une BATTERIE soumise à une pression atmosphérique extrêmement basse peut entraîner une EXPLOSION ou une fuite de liquide ou de gaz inflammable.

MISE AU REBUT DU PRODUIT ET REGLEMENTATION

Directive européenne des déchets des équipements électrique et électronique 2012/19/EU sur le traitement, le ramassage, le recyclage et les dispositions quant aux matériels électriques et électroniques et leurs composants.



Le symbole d'une poubelle barrée sur l'appareil signifie qu'il ne devrait pas être mis au rebut avec d'autres déchets ménagers à la fin de son cycle de vie.
Au lieu de cela, l'appareil devra être apporté aux centres de collecte des déchets pour l'activation du traitement, de la collecte, du recyclage et des dispositifs de retour et de récupération.
Afin de préserver l'environnement et la santé humaine de l'élimination des déchets non contrôlés, veuillez séparer ceux-ci des autres types de déchets et recyclez-les avec sérieux pour promouvoir la réutilisation durable des ressources matérielles.
Les utilisateurs résidentiels doivent contacter le revendeur où ils ont acheté ce produit, ou leur bureau d'administration locale, pour connaître les détails d'où et comment ils peuvent procéder à un recyclage écologiquement sûr de cet article.
Les utilisateurs professionnels doivent contacter les fournisseurs et vérifier les termes et conditions de leur contrat d'achat. Ce produit ne doit pas être mis au rebut avec d'autres types de déchets commerciaux

Revision History

Changes to the original user manual are listed below:

Revision	Description	Date
1.0	• Initial release	November 2024

Table of Contents

1. Packing List 1
   1-1. Standard Accessories 1
   1-2. Optional Accessories 1

2. System View 2
   2-1. Top & Bottom View 2
   2-2. Front & Rear View 3
   2-3. Dimensions 3

3. System Assembly & Disassembly 4
   3-1. Install Power Adapter 4
   3-2. Remove Bottom Cover 4

4. Peripheral Installation 5
   4-1. Install VESA Mount 5
   4-2. Install microSD Card 6
   4-3. Install M.2 SSD Card 6
   4-4. Install WLAN Card & Antennas 7

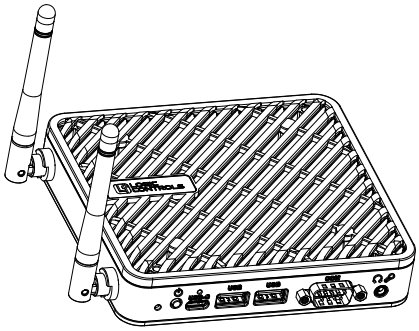
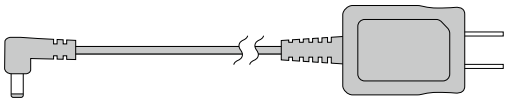
5. Specification 9

6. Configuration 10
   6-1. F38 Motherboard Layout 10
   6-2. Connectors & Functions 12

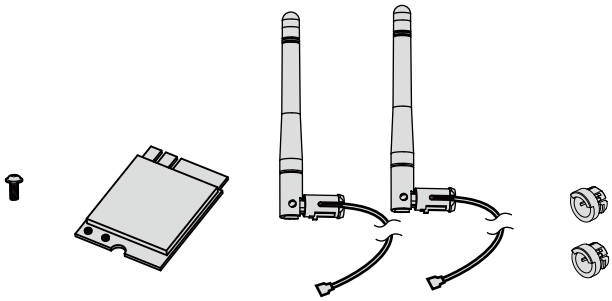
The page is intentionally left blank.

1. Packing List

1-1. Standard Accessories

	
a. System	b. 12V/36W power adapter

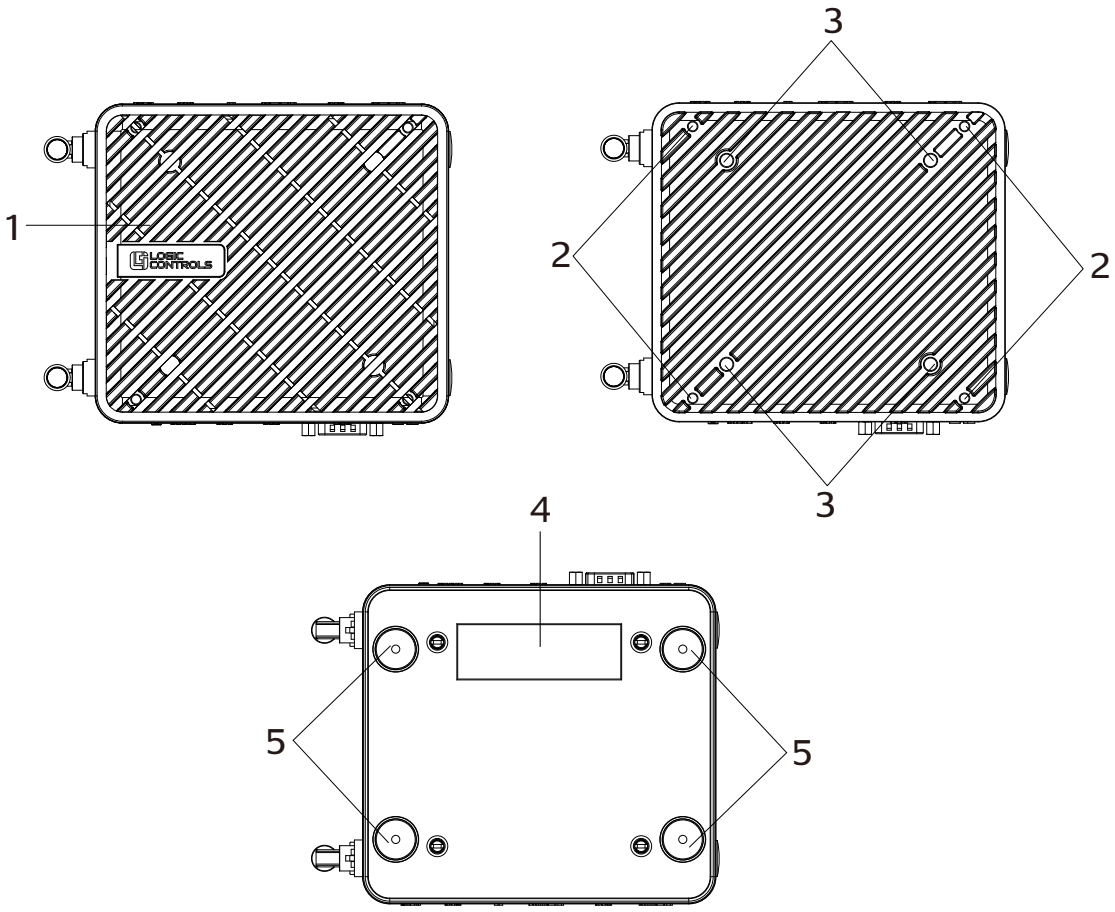
1-2. Optional Accessories


a. WiFi kits (WiFi card x 1, screw x 1, antennas x 2, antenna holders x 2)

2. System View

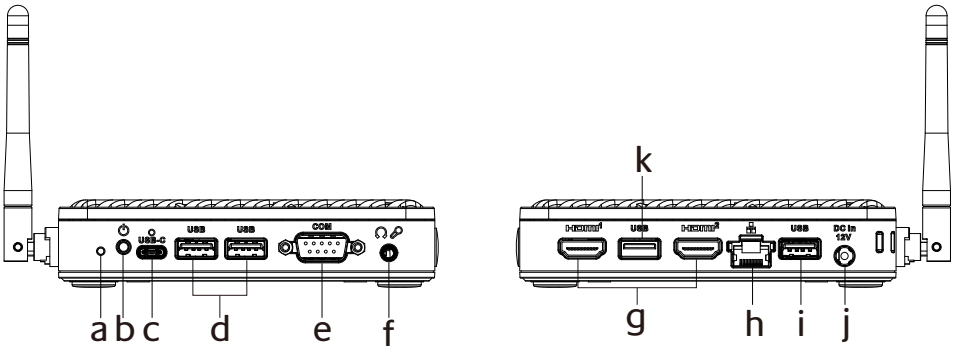
2-1. Top & Bottom View

without thermal insulating plate



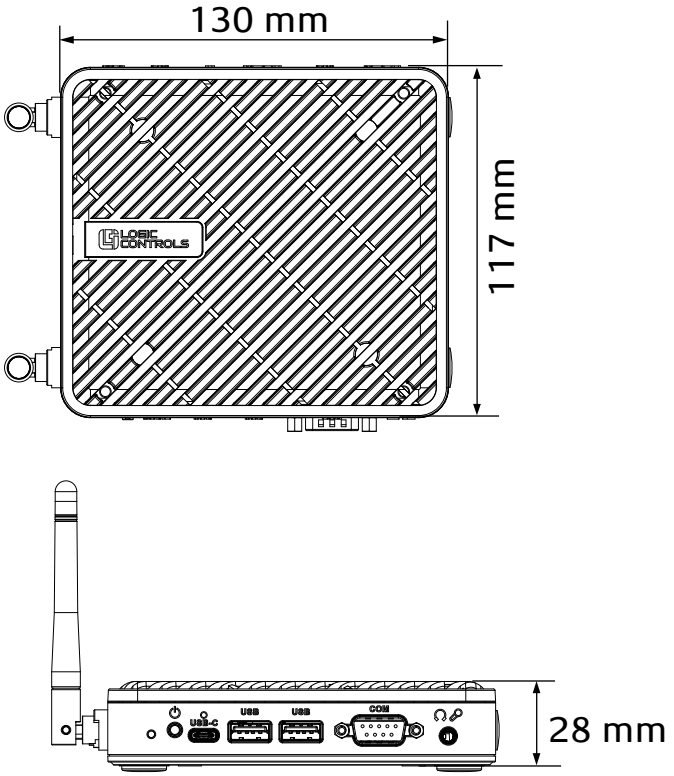
No.	Description
1	Thermal insulating plate
2	Standard VESA holes (100 x 100 mm)
3	Standard VESA holes (75 x 75 mm)
4	Safety Label
5	Rubber foots

2-2. Front & Rear View



No.	Description
a	Power LED
b	Power button
c	USB Type-C
d	USB 3.0 x 2
e	COM
f	Mic-in / Line-out
g	HDMI x 2
h	LAN
i	USB 3.0
j	DC 12V in
k	USB 2.0

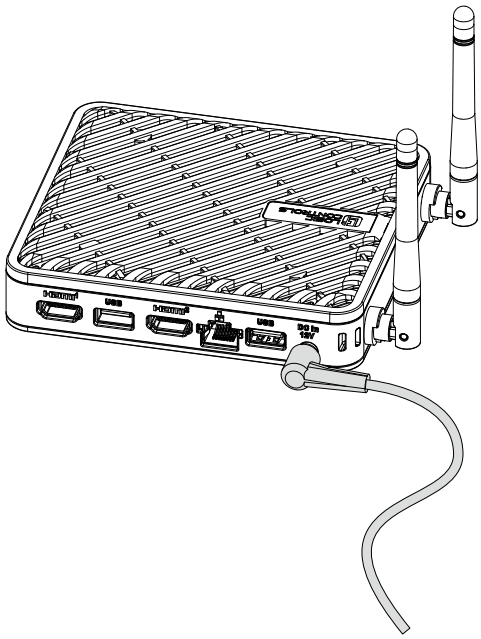
2-3. Dimensions



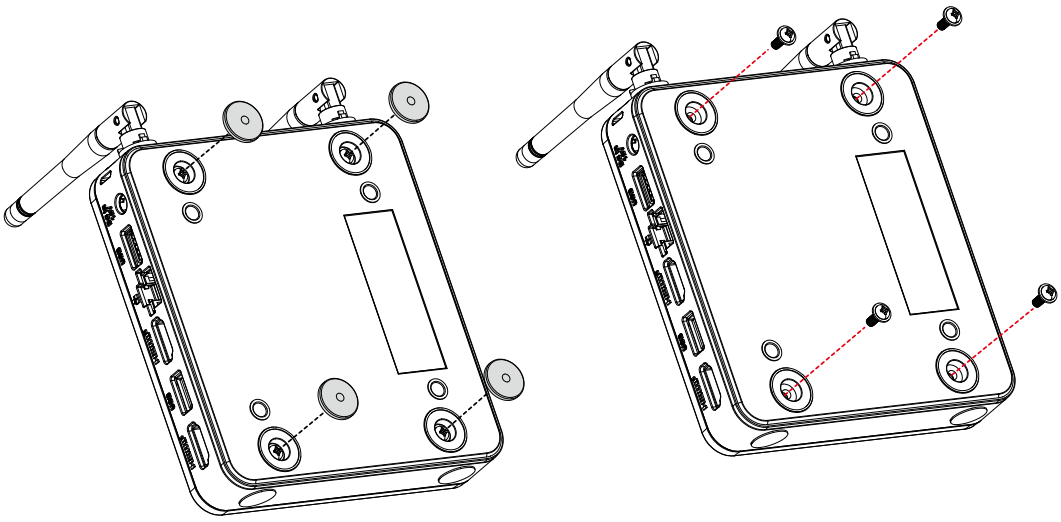
3. System Assembly & Disassembly

3-1. Install Power Adapter

1. The system is equipped with a 12V/36W power adapter. Find the power connector on the I/O panel.(refer to chapter 2-2 j) and plug the cable directly into the DC-in connector. Then plug the adapter into the AC outlet.



3-2. Remove Bottom Cover



1. Turn over the system.
2. Remove the rubber foots (x4).
3. Loosen the screws (x4) and lift up the bottom cover.

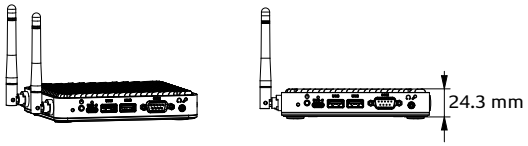
4. Peripheral Installation

4-1. Install VESA Mount

The system creates a compact all-in-one solution and can be directly mounted on the wall, a monitor or under a desk. Its built-in VESA mount allows a monitor to be attached using 75mm and 100mm VESA hole patterns, which makes it compatible with most flat panel displays.

IMPORTANT: For product protection and safety purposes, we recommend you follow the instruction methond given below:

- Find the location to install the mount. Drill 4 holes in the location and make sure the depth of mounting holes is 5.5mm.

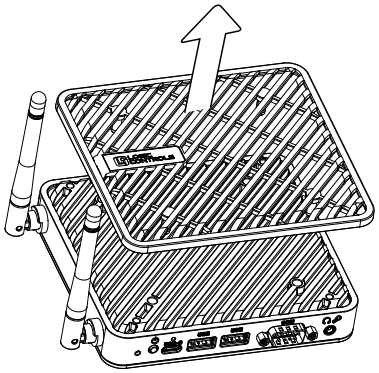


System thickness: 24.3mm
Rubber foot *not* included
Thermal insulating plate *not* included

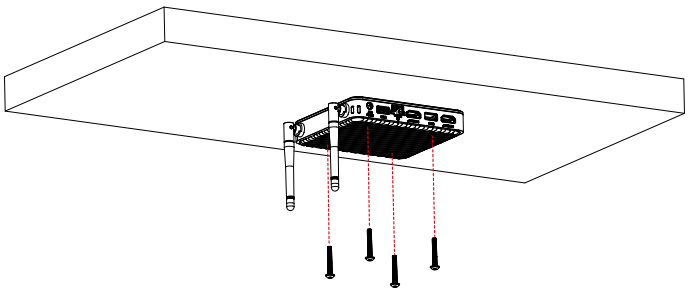
- The screws are not supplied. We suggest M4 x 29mm screws for your wall or other mounting locations. Using improper screws will cause an unsafe and insecure mounting environment for the system.

Screw(quantity)	
M4 × 29 mm, pan-head, nylon-coated (x4), head diameter > 7.5mm	

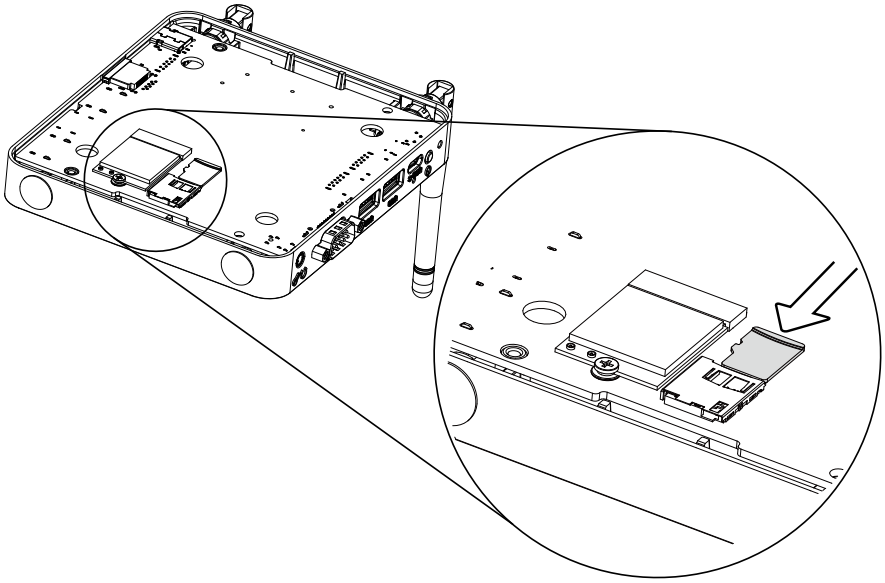
1. To install the VESA mount, please remove the thermal insulating plate first by pulling it upwards as picture shown.



2. Position the system under the desk (or wall, moniter) and fasten with the screws (x4) to secure.
3. Place the themal insulating plate back.

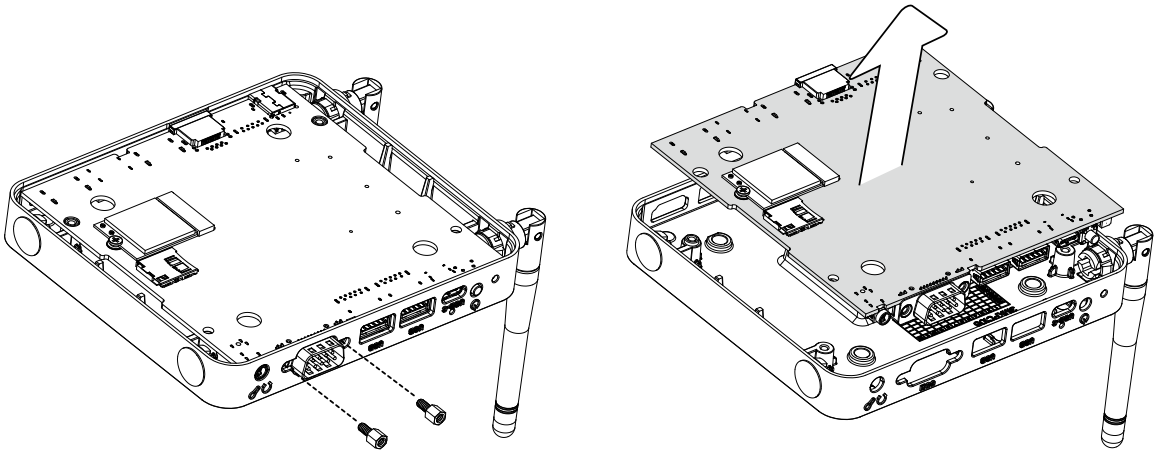


4-2. Install microSD Card



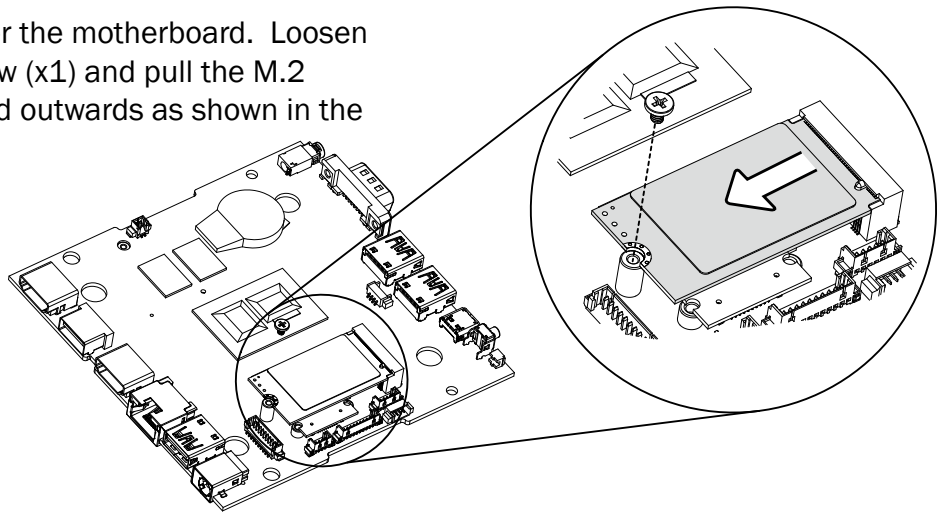
1. Follow the steps described in Chapter 3-2 to release the bottom cover first.
2. Insert the microSD card into the storage card slot with its gold contacts facing down and push it all the way until it clicks into place.

4-3. Install M.2 SSD Card

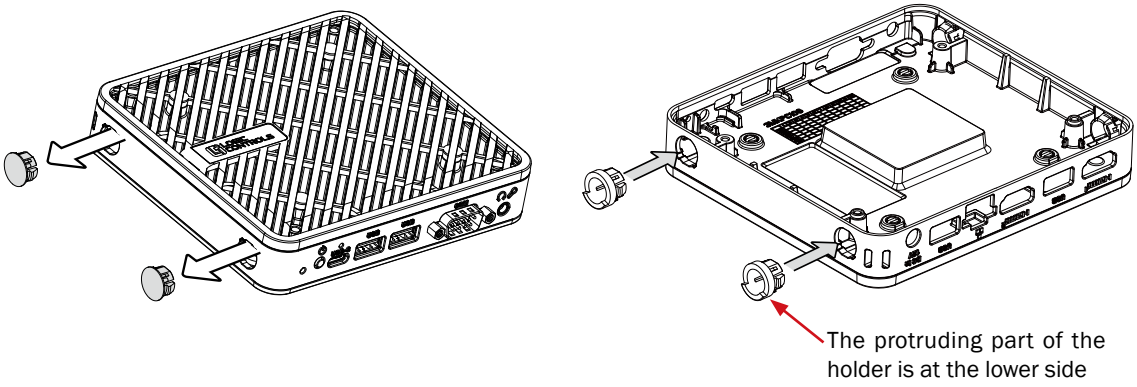


1. Follow the steps described in Chapter 3-2 to release the bottom cover first.
2. After removing the bottom cover of the system, you can see the bottom layer of the motherboard.
3. Loosen the hex screws (x2) that secure the DB9 COM port to the motherboard.
4. Lift up the motherboard.

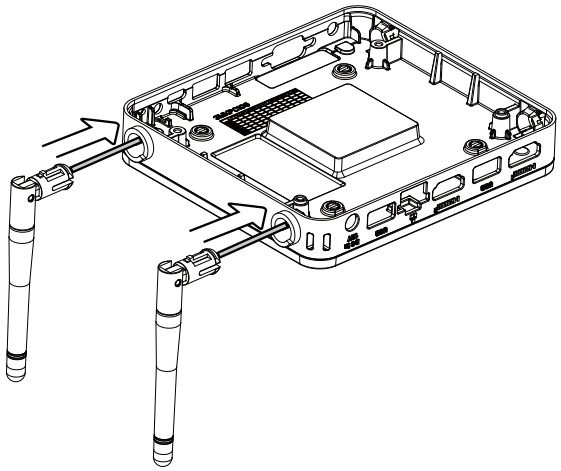
5. Turn over the motherboard. Loosen the screw (x1) and pull the M.2 SSD card outwards as shown in the picture.



4-4. Install WLAN Card & Antennas

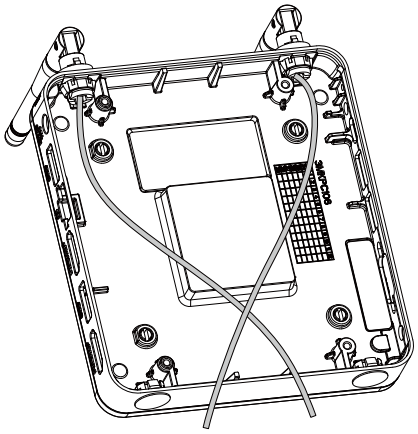


1. Remove the antenna hole covers (x2).
2. Follow the steps described in Chapter 3-2 to remove the bottom cover of the system.
3. Follow the steps 1~4 described in Chapter 4-3 to remove the motherboard.
4. Push the holders all the way into the antenna holes until they snap in place.

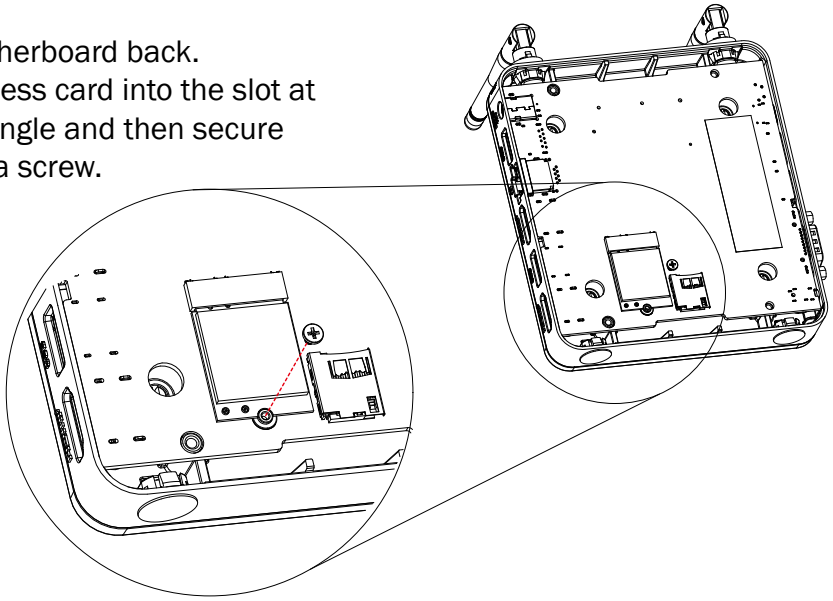


5. Thread the cables along with the antennas through the antenna holes and then attach the antennas to the holders. Make sure the antennas are tightly fit that won't come off from the holders.

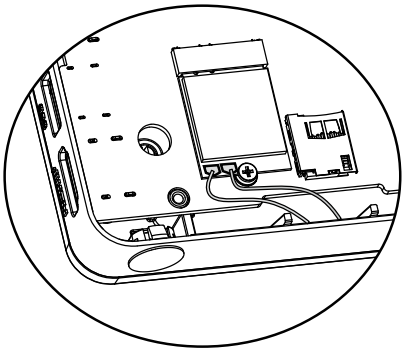
6. Route the cables as picture shown.



7. Place the motherboard back.
8. Push the wireless card into the slot at a 30 degree angle and then secure the card with a screw.



9. Connect one of the cables on the main connector on the wireless card and another one on the auxiliary connector.
10. Place the bottom cover back.



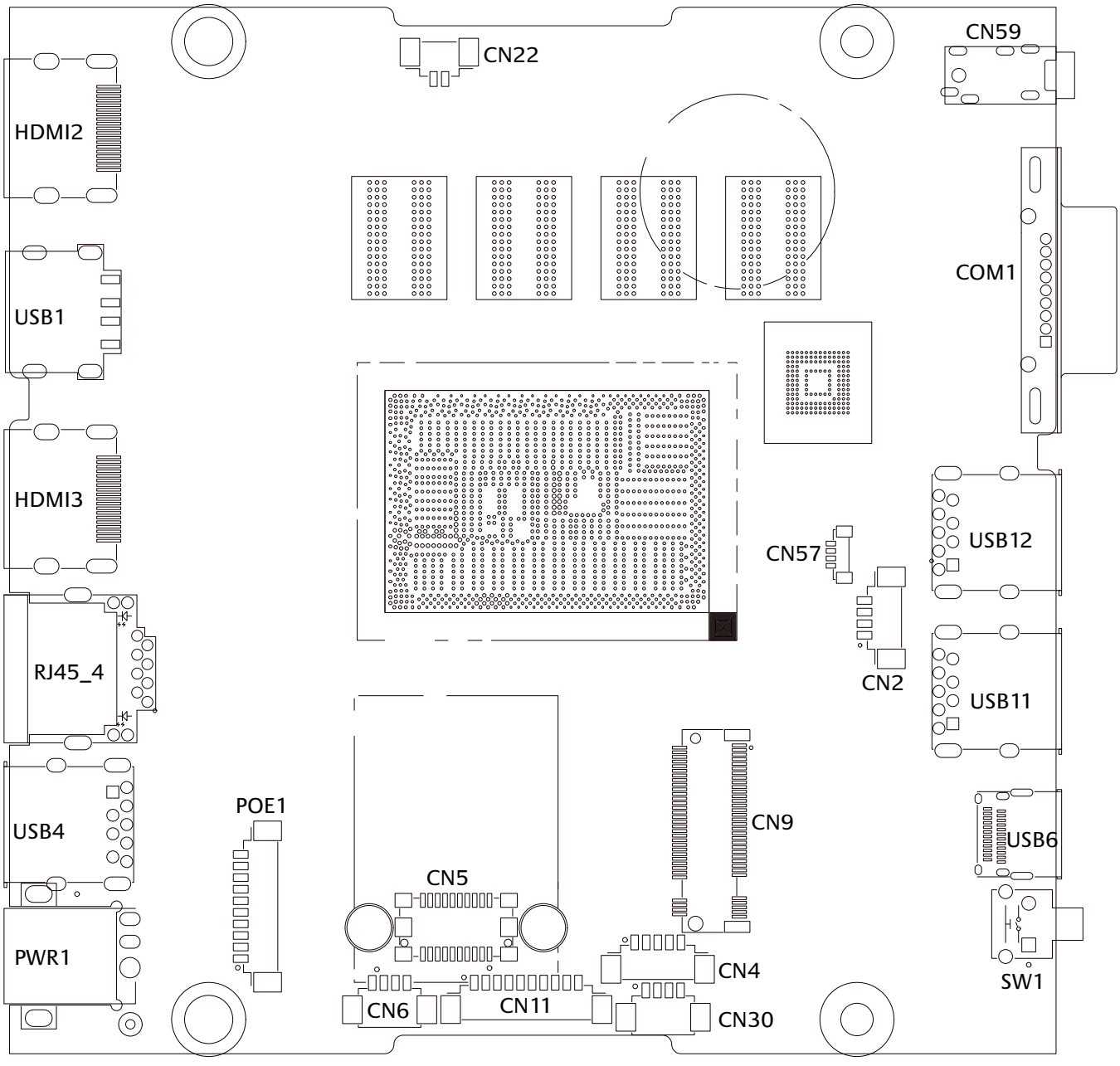
5. Specification

Model Name	**Elite 9550**
Mainboard	**F38**
CPU	Intel Elkhart Lake CPU EIA GT2 CELERON (J6412) 2.0G/3200M 10nm FCBGA
Chipset	CPU Integrated
System memory	On board memory 8GB DDR4
Storage	
Flash memory	128GB eMMC
External Front I/O Ports	
Power LED	1
Power button	1
USB Type-C	1 x full-functional (support USB3.0/USB2.0/Display port) PD source 5V(3A) / 12V(1.5A)
USB Type A	2 x USB 3.0
Serial / COM	1 x DB9 (COM1 default 0V, 5V/12V, 0.5A powered enabled by BIOS)
Phone jack	1 x Mic-in & Line-out
External Rear I/O Ports	
HDMI	2
USB Type A	1 x USB 2.0 / 1 x USB 3.0
LAN	1 x RJ45
DC jack	1 x 2 pin
Power	
Power adapter	12V/3A, 36W
Internal Function Connectors	
M.2 (E-Key)	1 x M.2 slot (E-key 2230 for Wireless LAN)
M.2 (M-key)	1 x M.2 slot (M-key 2242 for SATA & NVMe SSD)
Micro SD socket	1 x Micro SD card socket, support SDXC *(*For optimal performance, please use microSD UHS-I U1 or Class 10)*
Communication	
Wireless LAN/ BT	M.2 Intel WiFi 6 AX210 a/b/g/n/ac/ax, 2.4G/5GHz, BT5.2 (option)
RF Antenna	
Antenna	WiFi/BT x 2 (option)
Certificate	
EMC & Safety	FCC Class A, CE, LVD, Criteria B
ESD	4 kV Contact discharge, 8 kV Air discharge
Environment	
Operating temperature	0°C ~ 35°C (32°F ~ 95°F)
Storage temperature	-20° ~ 60°C (-4°F ~ 140°F)
Humidity	20% - 85% RH non-condensing
OS support	Windows 10 IoT Enterprise, Win11 IoT Enterprise (64-bit), Linux, Android 13.0

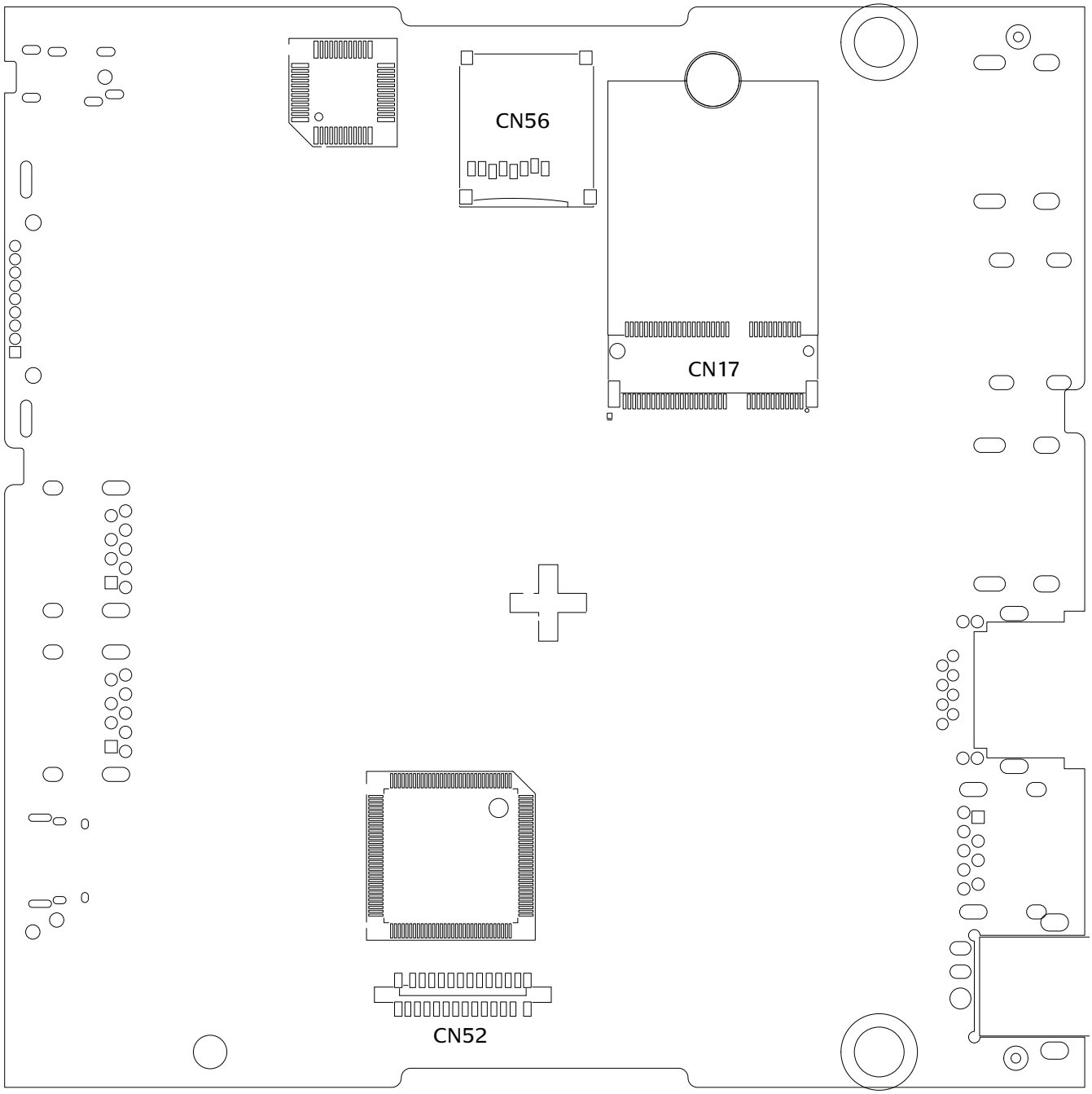
*This specification is subject to change without prior notice.

6. Configuration

6-1. F38 Motherboard Layout



F38 V1.2 Top Layer



F38 V1.2 Bottom Layer

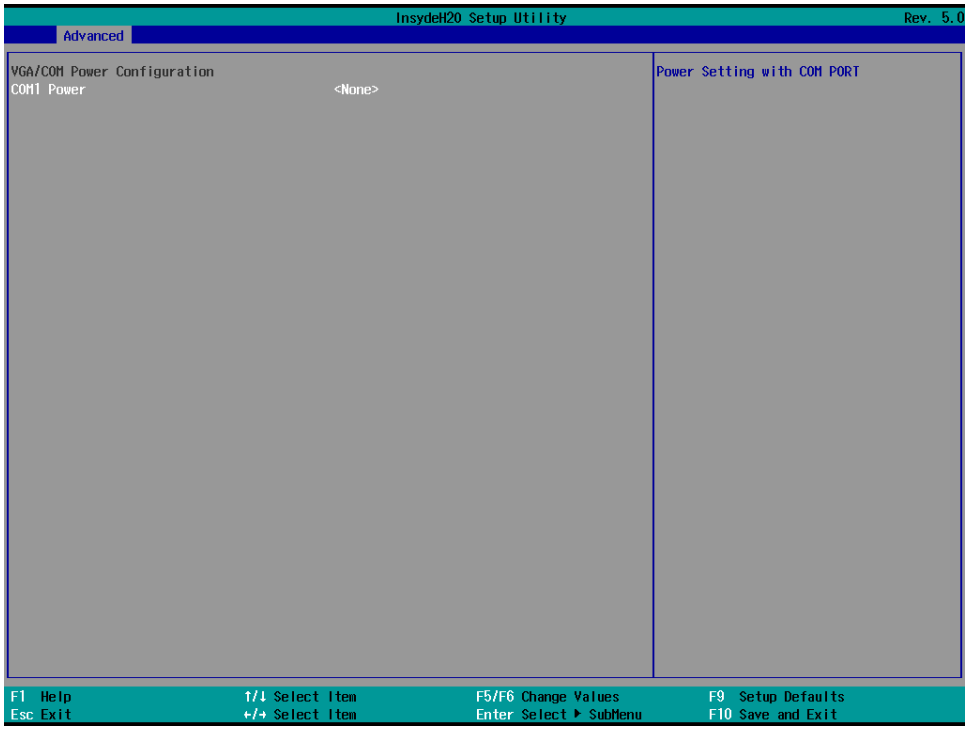
6-2. Connectors & Functions

Connector	Function
CN2	4 pin power button w/2 LED connector
CN4	EC debug connector
CN5	OOB connector
CN6/CN30	Internal USB 2.0 connector
CN9	M.2 slot, M-Key for storage
CN11	EC GPIO connector
CN17	M.2 slot, E-Key for wireless card
CN22	RTC battery connector
CN52	Power sequence test connector
CN56	Micro SD card socket
CN59	Audio jack
POE1	POE connector
PWR1	DC-in connector
RJ45_4	LAN connector
SW1	Power button
HDMI2/HDMI3	HDMI connector
COM1	COM1 connector
USB1	USB 2.0 connector
USB4/UB11/USB12	USB 3.0 connector
USB6	USB Type-C connector (DP/USB3.0)

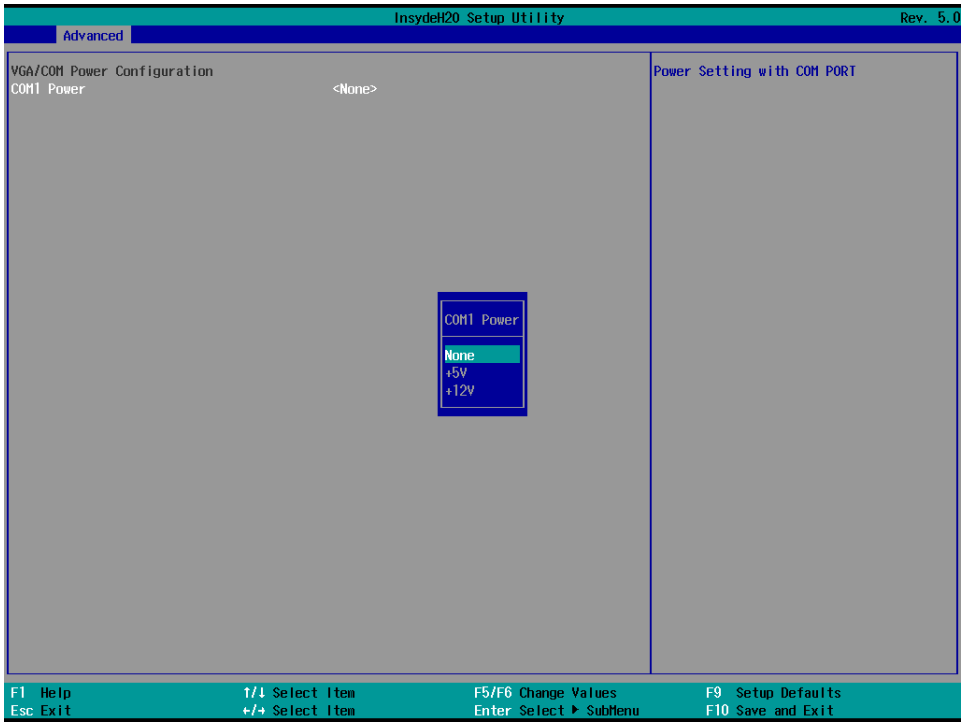
Note: *Connectors and jumpers will be different according to product difference, the real object should be considered as final. Contact your POS Systems authorized distributor or reseller for technical information or specific device configuration.*

COM Power Setting

COM1 can be set to provide power to your serial device. The voltage can be set to +5V or +12V in the BIOS.



1. Power on the system, and press the <DEL> key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab.



3. Select **VGA/COM Power Configuration** Ports and press <Enter> to go to display the available options.
4. To enable the power, select COM Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.